

10/016008

Appl. No. 10/106,000

Attorney Docket No. 81839.0108

Amdt. Dated August 19, 2003

Customer No.: 26021

Reply to Office Action of May 19, 2003

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the Claims:**

Claims 1-13 (Canceled)

14. (Currently Amended): A method for producing a semiconductor wafer by polishing a surface of the semiconductor wafer which is held at its back surface, which determines a back surface profile and analyzes its frequency to calculate its power spectrum density at least before holding the semiconductor wafer, and polishes only a semiconductor wafer having undulation components on wafer back surface of 10  $\mu\text{m}^3$  or less represented in terms of power spectrum density at least for the components at a wavelength of 10 mm and/or a variation of power spectrum density of 2.0 or less for undulation components at a wavelength of from 3 mm to 20 mm of the wafer back surface.

15. (Previously Presented): The method for producing a semiconductor wafer according to claim 14, which utilizes a semiconductor wafer having wafer warpage of 20  $\mu\text{m}$  or less.

16. (Previously Presented): The method for producing a semiconductor wafer according to claim 14, which utilizes a silicon semiconductor wafer.

17. (Previously Presented): The method for producing a semiconductor wafer according to claim 15, which utilizes a silicon semiconductor wafer.